

ABSTRACT

A hubcap breather assembly is provided for a hubcap housing lubricated wheel bearings in an automotive vehicle. The breather assembly includes a resilient, annular collar that fits into an access opening in a hubcap end wall, a filter cartridge cup, and a filter cartridge lid which fit together to hold a filter therebetween in a filter cartridge chamber. The filter is a hydrophobic, gas-permeable, particulate matter filter that is disposed within and extends entirely across the filter cartridge chamber. Ambient air entering the hubcap through the hubcap breather assembly is filtered to exclude both particulate matter and water before entering the wheel bearing chamber. The filter is preferably formed of three layers, including an outboard porous layer of sintered polypropylene plastic, an intermediate hydrophobic layer of polytetrafluoroethylene, and an inboard porous layer of sintered polypropylene plastic. The filter can be replaced by separating the filter cartridge lid from the filter cartridge cup.